***HOW TO SUCCEED IN 3U BIOLOGY***

* ***Class time is LEARNING TIME!***
  + Active participation in your learning is important to your success
  + My motto “NEVER THINK ‘I WILL LEARN THAT LATER’”
    - Steps to take when a concept isn’t immediately clear

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| ***During Class*** | ***During Independent Work*** |
| * Raise your hand * Even if you do not have a specific question, just letting me know that I lost you helps. I will dig, find the missing link and do my best to explain again * Remember, YOU ARE NOT THE ONLY ONE WITH THE SAME MOMENT OF CONFUSION! And if you are, who cares? Learning isn’t about them, it’s about you. * Still unclear? Have a page in your binder where you write down unresolved questions or topic headings to return to at the end of the lesson with me one on one * Never leave confused! Talk to me and I will either recommend practice or extra help ASAP! | * ASK YOURSELF! STRUGGLE! RE-READ! READ YOUR TEXT * Ask a friend / neighbour. * If at home, write down the question or topic that has got you stumped (maybe even remind yourself in your agenda to ask about it) * If in class, ask me! * Still don’t get it? Struggle again! * Still don’t get it? Extra help * No-one can GIVE you knowledge or a skill, you have to seek it and build it. You must be your own primary resource for learning during independent work. |

* ***Nothing is more important than a good set of notes!***
  + There is WAY too much information for me to test everything. I choose what I feel is most important and that is what I present in class
  + Supplementing your notes with both content and anecdotes is critical
  + If you don’t yet take great notes, have a keen friend who is willing to share their notes with you… offer them yours too. You will be amazed at how two different people in the same class pick up on different things.
  + I view the textbook as a SUPPLEMENT to my notes to give students a deeper understanding
  + THINK BIG PICTURE IDEAS
* ***Science is LOGIC!***
  + Some students think that biology is a course in memorization. These students often miss the fun of the topic. Furthermore I have found that memorizers lack the ability to spot my big picture ideas. They have a hard time distinguishing between details and depth. They often fall into the trap of info-dumping on tests.
  + Try to remember that science class introduces you to concepts and explanations of how things work based on evidence. Since these are new ideas, and classification systems science needs its own language to talk about them. Learn the concepts and you will find that you need the vocabulary to explain it. Almost all of the “memorizing” in biology should be memorizing the terms used to explain new concepts.
* ***Studying means DOING!***
  + The best types of practice problems are holistic communication questions where you need to explain (i.e. teach) a concept. Given the choice between writing a point form summary note or writing a summary paragraph of key ideas, I choose the paragraph. Even doing this orally will make it sink in.
  + For things that warrant memorization like terms and lists there is no substitute for repetition and self-quizzing. Write words over and over again if they do not stick right away. Make flash cards.
  + DO ALL CORRECTIONS to homework, quizzes and tests. Try them again on your own if you made mistakes or lacked depth to your answers.
  + Predict my questions, and try to answer them on paper.
  + DO NOT WASTE YOUR TIME READING AND COPYING!!!!
* ***More heads are better than one***
  + After studying independently consider STUDYING WITH A FRIEND. Either over the phone or face to face. (Not through social media… it is inefficient for studying)
  + Ask each other questions
  + Give each other feedback
  + Divide up topics and teach each other
  + The ultimate test of understanding is being able to explain it clearly to someone else
* ***Last, but not least…come in for extra help (only once you have struggled through all the difficult concepts on your own).***
  + There is no substitute for independent learning. The ultimate goal is to become an independent learner and not rely on extra help. However, everyone is at varying stages of this process and has strengths and weaknesses. If you encounter a topic that just isn’t sinking in after ALL of the steps listed above, please never hesitate to just come in for extra help.
  + I will ALWAYS give you feedback on practice